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COBBET ON GARDENING.

On the making and managing of Hot-beds and Green-houses.

(CONCLUDED.)

When you have taken off all the lights, make little drills with your finger, from the back of the bed to the front, half an inch deep, and an inch apart. Make them equi-distant, parallel, and straight. Then drop in your cabbage seeds, along the drills, very thin; put twenty seeds, perhaps in an inch; for some will not grow, and some may be pulled up when they appear. It is better to have rather too many than too few.—When you have dropped in your seeds all over the bed, and distinguished the several sorts of cabbages by names, or numbers, written on a bit of paper, and put into the cleft of a little stick, stuck in the ground; then cover all the seeds over neatly and smoothly. Put on the lights; and look upon your spring work as happily begun.

But now we come to the management of a hot-bed. And observe, that the main principle is, *always to give as much air as the plants will endure*. I have always observed that the great and prevalent error is, an endeavor to obtain, by exclusion of air, something to make up for the want of bottom heat. It is not thus that nature operates. She gives the air as well as the heat; and, without the former she gives nothing. I suppose the hot-bed, made as above, to be about four feet high, when just finished. It will sink as it heats; and will at last, come to about a foot and a half. Its heat will gradually diminish; but, it will give a great heat for about six weeks; and some heat for four months. It is this bottom heat that makes things grow. The sun is often hot in May; but, it is not till the earth is warm that vegetation advances with rapidity.

Having secured the bottom heat, make free with the air. Even before the seeds begin to appear, give air to the bed every day, unless it be very cold weather indeed. The usual way of giving air is by bits of thick board, cut in the shape of a triangle, or, rather, like a wedge, broad at one end, and coming to a point at the other. Each light is lifted up, either at back or front of the frame, as the wind may be, and the wedge, or tilter, as it is called, is put in, to hold the light up. But, if more air be wanted, the lights may be shoved up, or down; and, in a fine day, actually taken off.

When the plants come up, they will soon tell you all about air; for, if they have not enough, they will draw up long-legged, and will have small seed leaves, and, indeed, if too much deprived of air, will drop down and die. Take care in time to prevent this. Let them grow strong rather than tall. Short stems, broad seed leaves, very green; these are the signs of good plants and proper management.

It will be necessary to water. Take off a light at a time, and water with a watering-pot that does not pour out heavily. Water just about sun-set; and then shut down the light; and the heat will then rise, and make the plants grow prodigiously.

As soon as the plants are fairly up, thin them, leaving four in an inch; and stir the ground about at the same time with your finger. This will leave in the frame from twenty-five to thirty thousand plants. If you want less, sow in wider rows and thinner in the row. But above all things, give air enough. Do not attempt to make the plants grow fast. You are sure to destroy them, if you make this attempt. Have patience. The plants will be ready soon enough. Get them strong and green; and to do this, you must give them plenty of air. Remember, that, out of a thousand failures in hot-bed culture, nine hundred and ninety-nine arise from the giving of too little air.

However, it is not to be presumed that a hot-bed ground will be made by every farmer;—and, therefore, before I proceed further with my instructions about it, let me proceed upon the supposition that the afore-mentioned bed is made in some open place. In this case it will be necessary to use some precautions as to shelter.

While the dung is working, before it be made into the bed, it must, in case of very sharp frost, be covered, especially on the north and north-west sides. If it be not, it will freeze on these sides, and of course, will not ferment. However, this is no troublesome job: you have only to throw on a parcel of straw, or stalks, and take them off again when the frost relaxes. When the bed is made, this is what I did. I drove some stakes down, four feet distant from the bed, opposite the north side and the west end. I tacked a pole from stake to stake; and then I placed up along against this pole three or four rows of sheaves of tall corn-stalks. This sheltered the bed from the north west-winds, and prevented it from freezing on that quarter. Some sheaves might, besides, if necessary, be laid against the bed itself. But observe you must be able to get at the lights constantly to give air, and to see how things go on; and, therefore, it is better to have your shelter at some feet distance from the bed.

We now return to the bed and the plants. I suppose the seed to have been sown on the 10th of March, (*Long Island* mind,) and that you have been very attentive to give air and water. By the 10th of April, the plants will have eight leaves, and they will form one solid patch of green.—They will be a little drawn up, though you have given them plenty of air. And now they must be removed into a new bed. Dig out the ground a foot deep, four feet wide, and to as great a length as is required by your number of plants. Fill this hollow up with the best dung you have, cover it over with four inches of good earth;—and plant your plants upon it in rows four inches apart and two inches apart in the row. When you have put out the plants, water them lightly; and shade them for two or three days from the sun. They must also be sheltered every night in this manner. Take some rods, put one end of each rod in the ground on one side of the bed, and the other end on the other side; put these rods at about two feet asunder, all along the bed; then tie some rods long ways to these arched rods; so that when you have done, your bed has an arch over it formed by these rods.—Every evening about sunset, cover this arch with mats, with old carpets, or with a slight covering of any sort, which take off again at sunrise in the morning.

To put out all your plants in this way will require a very long bed, or many short ones. If therefore, your number of plants be very large, the best way will be to put a part of them in this way, leave the remainder in the hot-bed a week longer, (taking off the lights in the daytime,) and then to plant all the remainder out in beds of fine rich earth, in the natural ground, and without any covering.

Now here we drop, for the present, the subject of cabbage plants; because I am to speak of their culture under the word *Cabbage*, in that part of the work which will treat of the cultivation of vegetables. I am in this part of my work to confine myself to the making and managing of hot-beds; and I have selected the cabbage plant as a subject for explaining my meaning, because I think that the raising of that plant is one of the most useful purposes to which a hot-bed can be applied in America.

But a hot-bed may be applied to many other purposes. Lettuces may be raised in it.—Pepper grass, radishes, young onions, may be raised. Parsley roots may be put in, and fine parsley obtained in March. Asparagus may be raised in this way. It is not worth while to attempt to bring cucumbers and melons to fruit in a hot-bed; but the

plants may be raised there, and afterwards put out in the ground with great advantage in point of time. Several sorts of annual flowers and of green-house plants may be got forward by a hot-bed, which, without it, can hardly be got at all to any great degree of perfection. Of the management of these sorts of plants in a hot bed, I shall speak under their several names; but on the management of hot-beds there yet remain to be made some observations which have a general application.

As to heat and air, it will demand but little attention to manage well. But a little thermometer hung up or laid down in the bed, will be of use. The heat should not exceed seventy five degrees in the day time, and sixty at night. If it come down to fifty at night, it is better. If you cannot keep it down to sixty without giving a little air at night, give it, by putting something under a light, or two lights, to let in a little of the cold. For always bear in mind that when plants, of whatever kind, be drawn up, they are nearly spoiled.

When the sun comes upon the glass, it soon augments the heat; and the air must be given immediately, if possible, so as to keep down the heat. Changes are very sudden in March, April and May; and therefore somebody should always be at hand to attend to the hot bed. But if the master be from home, there is, surely, some man; or at any rate, a wife, a son, or a daughter. The labor is nothing, the trouble very little indeed, and all that is wanted is a small portion of care.

It may happen that the bed will get too cool. It may lose its heat sooner than you could wish, especially if you use it for cucumber and melon plants after you have used it for things that you want earlier; and I shall show that this may be very useful in certain cases. Now if the heat be too much diminished, you may easily restore it thus: make a little narrow hot bed, a foot and a half wide, all round the bed. Put the dung together as before, place it close to the bed, beat it well, and build it up, all around as high as the top of the frame. This is called lining; and it will give the bed nearly as much heat as it had at first. If you do not want so much heat, line only the back of the bed; or the back and the two ends. In short, take as much heat as you may want.

Before I dismiss the subject of hot-beds, I must notice that there are other contrivances than frames resorted to in this kind of garden work. A frame is, as we here see, a wood construction, for lights of glasses to be placed on. For smaller concerns there are very convenient things, called hand lights, or hand glasses. A hand glass is a square glass house in miniature.—Its sides are about eight inches high from the ground to the eaves. The roof rises from each side in a triangular form, so that it comes to a point at the top, as a pyramid does, the base of which is a square. At this point is a stout ring, to lift the hand glass by. The panes of glass are fixed in lead; and the rim round the bottom is made of iron or of wood. Any glazier can make these hand lights, and they are by no means expensive. Here, where the tax upon glass is so slight, they cannot be more expensive than in England; and there they do not cost much more than a dollar each. They may be made almost any size. About eighteen inches square at the base is a very good size. In the gardens near London there are acres of ground covered with such glasses. It is the custom there to plant out cauliflower in the fall, and to cover them, in severe weather, during winter, with hand glasses. A hand glass may, in April, be put over a hot bed made with a wheel barrow full of dung. It would bring on cabbage plants for two or three gardens. It is handy to sow things under in the natural ground, in the spring, especially flowers that are to be transplanted; for, on the natural ground, it adds to the heat in the day, and keeps off cold and slight frost in

the night. Air is given, by putting a brick, or bit of wood, under one of the sides of the hand glass.

LIQUID MANURE.

We wish to call the particular attention of farmers to the importance of saving liquid manure, which when mixed with loam is considered of equal value to the dung of animals, and exact experiments have proved this to be the case. The best way to save liquid manure and save the solid portion from any water likewise, is to have a barn cellar to receive the whole, and peat, mud, loam, &c. to absorb the liquid portion: these materials mixed with the solid parts of manure prevents violent fermentation and waste by the escape of the gasses, and being sheltered from rains, a great loss by washing away is prevented.

So important is the saving of liquid manure and preventing a loss in the other portion, that almost every farmer who now builds a barn in this section of the country constructs a good cellar for saving manure. Many who have experience in this business think that the manure saved in this way is worth double the amount when the liquid part runs away, and the other portion is thrown out to be washed by rains and wasted by exposure to the sun, drying winds, frosts and violent fermentation; and others, good judges too, consider that the manure saved in a barn cellar worth three times that exposed in the usual way. There is no subject of more importance to the farmer. Every one knows the value of this article, however negligent he may be about saving it.

The liquid manure from a cow in a year is estimated at 15,000 pounds.—Now let the farmer consider what a large heap of loam might be saturated with this liquid so as to be a valuable manure, and if applied as a top dressing to grass lands, how large a piece that now produces barely grass enough to pay for fencing, taxes, and the expense of securing the crop, might be enriched so as to yield 1½ or 2 tons to the acre, and by the increased crop of grass and hay, the stock of cattle could be increased, and so on, the crop of grass and animals increasing, and mutually increasing each other, till they are doubled and trebled, and on some farms that are now becoming exhausted, they would be quadrupled.

We have before suggested, and it may be well to repeat it, that those farmers who have no barn cellars can make much more manure than in the old way, by taking up the floor of their cattle house and putting in loam, peat, or other materials to absorb the liquid manure, and then replace the floor, or let the cattle be on the loam, and throw it out with the dung as it becomes saturated. Another mode is to use loam, leaves, or other materials for litter that will absorb the liquid matter. Let every farmer consider that one half or more of his manure is wasted by running away and by exposure, while perhaps he pays twice as much for manure as would be necessary to save what he has from waste, or not doing this, his scanty crops are an evidence of poor management.—*Boston Cult.*

LOCUST TREES.

The Rhode Island Society for the Encouragement of Domestic Industry, has, for several years, proposed a liberal premium for experiments in planting yellow Locust trees upon new land, or where the original growth of timber has been removed, and the land not cultivated. This premium was offered in consequence of a single successful experiment, made by Stephen H. Smith, Esq., of Smithfield, who planted this valuable timber tree upon a tract of land that had just before been cleared. The Locusts grew vigorously, are now of large size, and entirely unattacked by the borer.

The useful qualities of Locust timber are not excelled, if equalled, by any other, and if our less valuable forest trees could be replaced by Locusts, that should escape the ravages of the borer, a great deal of rocky woodland, that is of comparatively little value, might be made a profitable portion of many farms. We have had occasion to call the attention of our farmers to this subject before, and we consider it a matter of too much consequence, to allow the premium offered, to remain stereotyped upon the show-bill year after year, for the want of a little enterprise on the part of those most interested.

The objection urged against all such experiments is, that too long a time must elapse before the question can be settled, and if successful, before the labor expended is compensated. The same objection is made by the indolent and unenterprising, to the planting of fruit trees, and indeed, to many other agricultural undertakings. How

many such farmers have been content all their lives, and these often long ones, to live without the luxury of good fruits, or to eat those which no man will taste who has learned what good fruits are. One of the most enlightened agriculturists of Massachusetts, was preparing, some fifteen years since, the ground for an apple orchard. His father, then advanced in life, after surveying the ground observed, "Well, well, all that may do for your children or grand-children, but it will never benefit you at all." The same old gentleman ate the fruit from that orchard during six years before his death, and three or four years since, six hundred dollars were received by the sale of the apple crop from that very orchard.

The locust is of pretty rapid growth, and in the same time that cleared land would be covered with a natural growth of less valuable timber, locusts might be raised which are worth thrice as much. Our attention has been called to this subject, by the following paragraph in the last number of the Albany Cultivator:

"We know a number of farmers who keep a nursery of locusts, for the express purpose of increasing the value of their woodlots by transplanting this valuable timber wherever an opening offers."

We should like the Cultivator to say, if under such circumstances, the locust escapes the borer. We have very recently learned from Mr. Brown, who is preparing a valuable treatise upon American Forest Trees, that he was told at the West, that locusts in cultivated grounds suffer as much from the borer as in this quarter, but they are never attacked when grown upon new lands or among other forest trees.

The agricultural products of the boundless and fertile West, by the great improvements in the means of transportation, are brought in direct competition with our own, and our farmers are bound to avail themselves of every method by which to increase their resources. Improved methods of culture, active enterprise, and untiring industry are necessary, or the agriculture of New England will be annihilated, and we shall become, what is seriously to be deprecated, a community of mere traders or manufacturers. And we are not stupid enough to believe that raising sound locust timber will prevent this, but we know of some farms within a circuit of ten miles about Providence, where twenty acres, well stocked with sound locust trees of twenty years growth, would be worth more than the total amount of crops gathered from such farms in that time. Who will compete for the Society's premium? —*Providence Transcript.*

From the Mass. Ploughman.

LIQUOR FROM GAS WORKS.

NORTH EASTON, 16th Nov., 1844.

Mr. Editor,—Sir.—Allow me a small space in your valuable paper to direct the attention of your readers to a new article of manure:—the gas liquor, or ammoniacal liquor of the gas works. This article, has been scarcely tested by the farmers near Boston, although well deserving of their attention. It is a secondary product of the distillation of bituminous coal for light-gas, and contains about five per cent of ammonia, a chemical name for a substance which every intelligent farmer now knows to be a most essential principle in all animal manures. The ammoniacal liquor could be obtained in any quantity, and at a trifling cost, by persons living in the vicinity of the city, as it is now considered a waste product, and about 3000 gallons of different degrees of strength are conducted by a drain into tide water every week. I presume, at the works, it would be given to any one who would make a proper trial of it.

In the spring of 1843, I procured a barrel of this liquor, and applied it to a variety of vegetables, by diluting it with three or four times its weight of water, and pouring it on the ground around the plants. This was done many successive times in May and June, but without producing much effect on the growth of the plants, either good or bad, except in one instance, when some young cucumber plants were destroyed, by pouring the liquor upon them, diluted with only its bulk of water.

Having a suspicion the unfavourable result of my experiments with the gas liquor might be owing to improper management, I resolved to keep the remainder until another season, and make a new trial of it. To prevent the loss of the ammonia, I put into the barrel, containing about fifteen gallons of liquor, four ounces of sulphuric acid, and nearly half a peck of gypsum. This was done in August. It remained undisturbed till the middle of April following, when I made it into a compost with

swamp muck, rich in vegetable matter. The proportion of liquor used with the muck, was one of the former to ten of the latter. At the same time another compost was formed by mixing one part of good wood ashes with seven parts of muck.

On the 20th of May these composts were used to manure a small piece of ground reserved for the purpose, one-third being manured with the gas liquor compost, another third with the ashes compost, and the remaining portion with muck alone, equal quantities of each being used. The piece was planted with potatoes and Indian corn, the number of hills of potatoes or corn being the same for each kind of manure. The divisions were cultivated alike through the season.

In September, the potatoes were dug and weighed, their weight for each division being in the proportion of 16, 14 and 10, for the gas liquor compost, ashes compost, and muck, respectively. The yield of an equal number of hills manured with common barn-yard manure, was the same as that with the ashes compost. With the Indian corn, the difference was evidently greater in favor of the gas liquor compost than with the potatoes, but, owing to a part of the corn being destroyed by hens, when nearly ripe, it was not injured.

One or two circumstances deserve to be mentioned; the manure was placed in hills, and on opening them, where the gas liquor or ashes had been used scarce a vestige remained of the muck; but where this last had been used alone, it remained, to appearance, unaltered. Here is an important fact demonstrated, that ammoniacal liquor possesses the same property with ashes in rotting or decomposing inert vegetable matter, and even in a greater degree. To this, I think, the fertilizing effect of the combination is principally owing. On the ground where the ammoniacal liquor was put, the potatoes were very fair and smooth, and not a worm was found, although on the ground adjoining, manured from the barn-yard, the potatoes were much disfigured and gnawed by worms.

The gas liquor, as it comes from the works, contains a small quantity of sulphurated hydrogen and sulphurous acid, combined with ammonia. These acids are noxious to vegetation, but, by exposure to air, and decomposing vegetable matter, they are changed after a time, and become harmless, or even food for plants. For this reason, the liquor should remain in a compost or some other form, for a considerable time before being used.

In making compost, a variety of substances might be used with the ammoniacal liquor and muck, particularly wood ashes and bone dust. I think such a compost could be cheaply made, that would be equal in value to the best stable manure. It would contain every essential element that growing plants drew from the soil, which should be the case with all manures applied to the same ground for a succession of years. Yours, respectfully,

EDWIN MANLEY.

[Of the fertilizing properties of the ammoniacal liquor from Gas works there can be no doubt. The best way to use it, would be for every hogshead of the liquor to be incorporated with one bushel of plaster and ten loads of any kind of earth; and we have no doubt that such a compost would prove equal, if not superior, to an equal quantity of the very best stable manure. The plaster would give fixedness to the ammonia in the liquor, and hold it in reserve to be taken up at will by the rootlets of the plants.—*Ed. American Farmer.*]

From the Albany Cultivator.

CONTINUANCE OF MILK IN COWS.

Messrs. Editors:—It certainly would be a very great advantage to those who wish to keep a cow or cows, solely for their milk, if any feasible method could be adopted by which cows could be made permanent milkers, or their owners particularly those who live in cities, be saved the trouble and inconvenience of their breeding. There are two ways in which this seems practicable. The first method is to keep the cow in milk, from the bull, by constantly stabling her, after her first and second calf, and in this state milked regularly and well fed, she will continue to give milk for two or more years. She usually ends, however, by becoming too fat for profit as a milker, her milk gradually failing, and she then goes to the butcher. The large dairies of London, have their cows treated in this manner, and in practice it is found far preferable to the old one, of having them "come in" annually.

There is another method of obtaining constant milkers which has been extensively practiced in France, and known to some extent in this country. This is by *spaying the cow* some four or six weeks after calving, and thus by preventing impregnation, securing the cow in milk for several years. In the London Veterinarian may be found a paper by M. Rogere, of Bordeaux, in France, who had for many years been engaged in a series of experiments on this subject, that had been eminently successful. The cows operated upon were of various ages, some quite old. The operation of spaying was followed with a restricted diet to prevent the tendency of inflammation. This had the effect of reducing the quantity of milk for a few days, but the flow soon returned, and continued unaffected for a long time. No danger was incurred by the operation when skillfully performed, and when from age or failure of milk, it became desirable to make beef of the animal, she was found altogether superior for that purpose to the unspayed ones.

In one of the earlier volumes of Ruffin's Farmer's Register may be found a paper on spaying cows or heifers, not only for milk, but for feeding. Mr. Tabb, of Virginia, under whose superintendence the operations were conducted, confirms the representations made of the value of milch cows so operated upon, but thinks it is not less essential or important where cows or heifers are to be fed. The following extract is from Mr. Tabb's paper:—"The operation is performed on heifers not intended for milk when they are about a year old, and with the single precaution of keeping them entirely from food or water during twenty-four or thirty-six hours previous—is not attended with the least risk—is performed in the same way, and may be done by any person in the habit of spaying pigs. They go to their food immediately after, and require no attention. We select the most indifferent heifers to spay, which is one way to improve the stock. You increase the size amazingly. They gradually become as large as ordinary oxen—are easily kept—make the finest beef—and as they are not in perfection until six or seven years old, we work them after three or four, to make them gentle, and for that purpose, consider them superior to the ox."

The practice of working milch cows is common in Germany, as appears from the accounts of various travellers in that country; and teams of spayed heifers have carried off prizes at the plowing matches of Agricultural Societies in England. The suggestion made above, by Mr. Tabb, as to the practice of spaying having a good effect in the improvement of stock, is an important one. If the breeders of stock could so far forego the hope of immediate profit, as to be willing to submit all inferior heifers to spaying, it is evident the chances of breeding inferior animals, would diminish rapidly.

Mr. Winn, keeper of an extensive hotel at Natches, communicated to Judge Peters, of Pa., the result of experiments made by him in spaying cows for the purpose of securing permanent milkers. It appears from the paper as given in the Transactions of the Pennsylvania Agricultural Society that he had two cows, which after being spayed, gave milk constantly for three years each. He preferred cows that had produced two or three calves, as the bags of such would be more capacious than if spayed after the first calf. I hope that some of our breeders or farmers will try this experiment, since if successful, there can be no doubt such cows would command greatly advanced prices in places where cows are kept for their milk alone.

A FARMER.

Ontario, Oct. 1844.

From the Southern Cultivator.

POTATOES.

Mr. Editor:—I have been of the opinion for several years, that the potatoe crop was too much neglected in this section of the country. The crop that I have made this year, has confirmed me in that opinion. I have planted a fraction more than two acres. Three-fourths of the land was of second year's tending, and was so full of roots and stumps that we could not prepare it for planting to my satisfaction; but after breaking up the land a time or two, the rows were run off in a horizontal position and beds thrown up with a turning plow, then a hand with a hoe made holes for every eighteen or twenty inches, in which the seed were dropped and covered—these were of the Spanish kind. The land is thin grey soil; growth post-oak and black-jack intermixed with pine. The other fourth of the ground planted, is old grey land, on which cows had been penned. This, and a small part

of the fresh land, was planted with yam-slips. (I here remark, that I have found out long since that the richest land is not the best for potatoes.) We hauled home and put away six hundred and forty bushels, and I suppose there were fifty bushels left on the ground for the hogs to get, and we must have dug at least ten bushels previously for table use, &c. At this, my crop from a little over two acres, is seven hundred bushels; but I will take it at 600 bushels, which at 20 cents per bushel, amounts to \$120. The same land in corn, under the most favorable seasons and best mode of culture, could not have made more than 80 bushels, that at 38 cents per bushel, (which is the settlement price,) amounts to \$30.40. I will allow \$10 for the value of labor (which is more than enough) expended on the potatoes, more than would have been required on the same land had it been in a corn crop; and will allow \$5 for fodder that might have been produced with the corn. At this calculation, there is a balance left in favor of potatoes of \$74.60. I may have priced the potatoes too high, but will leave it to the readers of the Southern Cultivator to put their own prices on each article—make their own calculations—draw their own inferences, and come to their own decisions as to the propriety of our planting more potatoes than we have heretofore; and what we do plant, be sure to cultivate well, as they are a crop that is well worth attention, if they were but to feed our stock on. They will fatten a hog quicker than corn; and for fattening an old ox or cow, I have never found their equal; as a change of food and for milch cows there is scarcely anything better; and for children, both white and black, they are the most healthy food we can give them.

I am, sir, yours respectfully, &c.

JOHN FARRAR.

P. S.—I will say to you, that I seeded two small lots in red clover and blue grass, about a year ago. As yet, they do not promise any big things. The clover, on a part of one of the lots, seems to be doing well, which is on the stiffest part of the land. On the softest part, the hot summer caused the most of it to disappear. There is a tolerable good stand of grass. Another year will prove whether it will succeed to much advantage.

Note by the Editor of the American Farmer.—If Mr. Farrar had sown $\frac{1}{2}$ a bushel of orchard grass to the acre, with his clover seed, the former would have protected the latter from the effects of the hot summer, and both grasses would have been increased in yield had he applied a bushel of plaster and ten bushels of ashes to the acre. His blue grass will promise bigger things next year, provided his land has been limed, lime being an indispensable ingredient in the soil to ensure success to the grass. Indeed, neither clover nor blue grass will prosper without lime.

MEANS OF CHECKING RUNAWAY HORSES.—When a Canadian family party, travelling in winter over ice-covered rivers and swamps, is so unlucky as to cross a place where the horse sinks, they save him from drowning, and themselves from the danger of sharing the same fate, by pulling a rope so arranged that it instantly chokes him.

The water being thus prevented entering his gullet, or windpipe; he floats on the surface, and it only requires a long firm pull to bring him to solid ground, when, the rope being relaxed, he quickly recovers his wind, and is ready once more to start on his journey. This plan of saving a horse's life by suffocating him is spoken of by the Canadians as an equally effectual and safe means of attaining the desired end, and it is in universal practice. A similar means of stopping runaway, and subduing infuriated horses, whether in riding or driving, has lately been adopted by Mr. Miller, an ingenious saddler, of Lothian street, Edinburgh, not in consequence of any knowledge of the Canadian plan, but as an original idea. It consists of a rein composed partly of thread-covered-cat-gut and partly of common leather, one end of which is attached to the bridle at the top of the horse's head, while the other rests at the pommel of the saddle, or on the splash board or coach box, as the case may be. Running upon the cat-gut part by means of loops, is a short cross-piece of cat-gut, which rests against the windpipe of the animal, ready to be pulled up against that organ, by taking hold of the nearer end of the rein. A quick and firm pull, to stop the breathing of the animal is all that is necessary to bring him to an instantaneous pause. He may be in a state of panic, and running off with the bit between his teeth in spite of every ordinary means of checking him; but no sooner does he feel the stricture of his breath-

ing, than he is conscious of being outwitted and nonplussed, and becomes instantly quiet as a lamb; at the same time he keeps quite firm on his legs—the check not being by any means calculated to bring him down. On the contrary, the position in which it places the horse, his shoulders being brought up, and being pressed back upon his haunches, the check is indeed eminently calculated to keep him up. A horse in a gig fitted up with a safety rein, was lately paraded before ourselves in a street of Edinburgh, and the animal was several times, in the height of his career (once when coming radially down hill) brought to a stand. We understand that the safety rein is coming rapidly into use: and friends as we are to every thing that tends to diminish evil, and promote the convenience and agreeableness of human life, we cannot but wish to see it in universal application. We feel assured that henceforth, by means of this rein, accidents from running away, or other violent conduct of horses, may be altogether prevented.—Chambers' Edinburgh Journal.

WHEAT CULTURE.—The past season has been marked by some important developments in the culture of wheat.

Dr. Noble, of Delaware, has been reclaiming a worn-out farm for several years by the use of street manure obtained from Philadelphia, and particularly with the view of growing his great staple. Having brought the soil to a pretty fair state of fertility, he has tried the relative advantages of planting wheat in drills, nine inches apart, and sowing it broadcast in the usual way. The soil and treatment in other respects were precisely alike. The result was thirty-four bushels on the sown land and forty two on the drilled. These experiments were made on fields of some acres. The soil from which this crop was harvested, a few years since, would not bear over six or eight bushels per acre. By planting the kernels just six inches apart each way, and feeding the plant on food containing, in a soluble state, all the elements necessary to build up its entire system, including the materials to form the straw as well as the berry, a gentleman in England has grown at the rate of three hundred and twenty bushels per acre!

Mr. James Campbell, of Scotland, has tried several interesting and successful experiments in the way of soaking seed wheat, barley, and oats, with a saturated solution of neutral salts, containing as nearly as practicable the precise elements found in the grain. The object of this was to secure the young plant a double supply of its appropriate nourishment. The effect has been a large increase in the crop, at a very trifling expense.

Other experiments have been tried in France, with a view to determine what portion of the organic, as well as mineral elements found in cultivated plants, is derived from the soil in which they grow, and what from the atmosphere. This is an important inquiry, and one that should be prosecuted in this country. The people of New York have paid something more than three hundred thousand dollars for a geological survey of its territory. A tithe of that sum, judiciously expended to diffuse among all our rural population a knowledge of the science of agriculture, would confer a tenfold greater benefit on the community at large. Breadstuffs and provisions must be produced with as little labor in New York as out of it, or farming will be a very losing business in the Empire State.

The manufacture of human food, like the fabrication of clothing, will soon be profitable to those only that combine the greatest skill and knowledge with manual toil. If a farmer will not study the laws of nature which govern the transformation of certain elements of the earth, air, and water, into corn, oats, and potatoes, and the further changes of these vegetables into pork, beef, milk, and wool, his hard labor will be of little worth.

[Buffalo Com. Adv.]

Clay on Trees.—Mr. Timothy Hill, of Wrentham, who has much experience in grafting and in nursing trees, tells us he finds clay an excellent article to apply to the bodies of apple trees after scraping off the moss and the rough bark; he prefers this to a wash with potash water.

He also says he has killed all the lice, called aphides, that are so very troublesome on the extremities of young trees, by one application of clay. We hope our friends in great numbers will make trial of this remedy, as lie cannot be used on the tender twigs and leaves of trees.—Mass. Plowman.

THE AMERICAN FARMER.

PUBLISHED BY SAMUEL SANDS.

DIVERSION OF LABOR.

We have frequently, within the last few years, resorted to the necessity which existed, for diversifying the agricultural labor of the country, and we do so again, because all subsequent experience convince us that, in the present situation of the world, causes are operating, and will continue to operate for a long series of years, to increase that necessity. The settled policy of Europe appears to us to be that of peace, so that it is useless for us to look in that quarter for any considerable markets for our surplus breadstuffs, as the longer this peaceful disposition among the Europeans remains undisturbed, the more competent will their people be to produce their own supplies, as each succeeding year of exemption from the evils of war, but serves to extend their resources, by adding to the number of the cultivators of the soil, thereby increasing its productions. Nor are we alone to look to these causes as the sole ones tending to this end. A spirit of improvement is abroad in England, France, and the other grain growing countries in that quarter of the globe, which cannot fail to increase the annual yields, and, as a necessary consequence, reduce the demand for foreign supply. "The wheat crop of England the present year, from all the recent accounts, appears to have been a most abundant one, and we are fully of the opinion, that it will nearly equal her consumption. The abundance in the supply has already, at the last advices, so far reduced prices as to advance the "duty to 20 shillings the quarter, the highest point in the scale, and at which it is likely to remain thro' the winter, so that the stock of United States flour held in England, and which in Liverpool alone amounts to 140,000 barrels, must remain in bond till next summer at least, with the exception of what may be required for export." Such are the opinions expressed in the English journals, which are corroborated by private advices. France, except when engaged in wars, has never been a customer to us for breadstuffs, and from the attention which is now being bestowed upon the culture of wheat in that country, we doubt much whether, even if she were placed in that relation, that she would need much to sustain her home population or armies abroad. As for the supplies drawn hence for the West India markets, they are as drops in the ocean, and can never be expected to exert any considerable influence upon our agricultural industry, for in addition to the smallness of the demand thence, the precariousness of the markets are such, that they but rarely operate to the advantage of the exporter. South America, does, to be sure, afford an outlet for a portion of our surplus; but there too, uncertainty of price and sale, often mar all hope of either realizing freight or much profit beyond it. And, indeed, taking the entire foreign demand into account, we very much question, whether Ohio, alone, could not from the abundance of her surplus, supply it. With these discouraging prospects ahead, we see no disposition manifested among wheat growers to divert a portion of their labor to other products; but on the contrary, its culture has year after year been extended, and is no being extended. By the operation of Peel's colonial regulations, which encourages the manufacture of flour in the Canada, by admitting wheat from the Western states contiguous to lake and canal navigation, England draws nearly all her breadstuffs from that quarter, so that the Atlantic wheat growing states, which formerly supplied her, are cut off and supplanted by the younger members of the confederacy, many of which States, only a few years since, were customers themselves for a portion of the bread consumed by them. But now, availing themselves of their unexhausted lands, they have become among the largest producers in the country, and by means of the

Canadian market, to which we have alluded, will aggrandise whatever trade in breadstuffs the necessities of England may unfold; for it has been the policy of Sir Robert Peel, by low duties, to attract the wheat into Canada, that it may be there ground into flour, and furnish employment and profit for the colonial subjects of England, knowing, as he does, that, by the concentration of labor among them, he adds to the wealth of that people, and to that extent diminishes the wealth of us, among whom the work of converting the wheat into flour was formerly performed.

From this view of the subject, it must appear obvious to all who will take the trouble to think, that those, in the middle and other wheat growing Atlantic States who have made that their money-crop, should be looking around, for some other articles of culture, to substitute, in part, for it, as beyond the home demand, the chances of a reliable market, to any extent, is circumscribed, and that, from the very nature of things, they have a right to look forward to its becoming more so for many years to come, as should the peaceful relations of Europe continue, the demand for breadstuffs in those countries, united as it now is, will decrease with each succeeding year.

Looking the subject full in the face, we think it should also be a primary object with all, besides turning their attention to other objects of culture, to so improve their lands, as that one acre shall be made to produce as much as two has hitherto done, in order that by the reduction in the cost of production, they may find their profits. This is perfectly practicable, and so will be considered by all, who may have noted the well attested facts which we have, from time to time, laid before them, of lands which had been exhausted by improvident culture, being made to yield in a few years, under a meliorating system, four-fold their former products. Instances of this kind are so numerous as scarcely to render it necessary to enumerate them; it may, however, not be inopportune to notice the very remarkable case, as furnished by the farm of Dr. Noble, near Chesapeake City, Delaware, where in the course of a single rotation, he augmented its productive capacity from some five or seven bushels of wheat to an average crop of upwards of thirty bushels per acre. We notice this case because it does not appear from Dr. Noble's statement that he expended any considerable sum in manures—his outlay for lime, if we recollect aright, was inconsiderable, as he only applied forty bushels to the acre, while his application of putrescent manures, was upon an equally limited scale, being but eight double-horse-cart loads of compost to the acre. Of what that compost consisted, is as yet locked up in the Dr.'s breast; but be it whatever it may, it has proved itself a most efficient agent in the melioration of his land and in the imparting to it the power of producing abundantly. In the absence of all knowledge of the constituent elements of Dr. Noble's "peculiar compost," we would recommend to all farmers, who may desire to be successful growers of wheat, to be careful in seeing that their lands be supplied with lime, or some other calcareous matter, and that they husband all the stale of their cattle, to be used in composts of peat, marsh mud, or mould and leaves from the woods, or any other earth of a fertilizing character, and that, to such compost, they add all the slops from their kitchen, and house, as soap-suds, urine, ashes, and whatever else of refuse matter, they may have about their premises, and that they prevent the escape of the virtues of such composts, by incorporating Plaster, or pulverized charcoal, with them. By a careful husbanding of such substances, daily, a sufficient quantity may be accumulated in a year to go over a very extensive field; and if the product can only be increased fifty per cent by such means,

and it may be a hundred, or more, the profit will more than compensate for any outlay of time and money. If any should object to such pains-taking, our reply to all such would be, that it is alone by such processes that the farmer will have to look for the sources of his remuneration.

BEMENT'S AMERICAN POULTERER'S COMPANION.

[*American Poulterer's Companion*: A practical treatise on the breeding, rearing, fattening, and general management of various species of domestic Poultry, with illustrations, and portraits of fowls, taken from life; by C. N. Bement. New York: Saxton and Miles, 205 Broadway.]

We are indebted to our old and valued friend Col. C. N. Bement, of Albany, New York, for a copy of his late work, bearing the above title. It is of large size octavo, comprises 479 pages, is beautifully executed, whether regard be had to its typography or embellishments, and what is of infinitely more value, is filled with matters of rare interest to every farmer and planter, who takes delight either in eating or rearing those varieties of the feathered tribe which have been domesticated by man, and which contribute so materially to the luxuries of the table, and so adorn the homestead of the husbandman.

To tell those who know C. N. Bement, either personally or by reputation, that he has made a good book, would be like carrying coals to New Castle, or warming-pans to the West Indies; but as there are many who are not familiar with his accomplishments as an Agricultural writer, we will say, for their information, that he has succeeded in making the best book upon the subject that we have read.

The embellishments are various, and as beautiful as various. The frontispiece is an excellent engraved sketch of *Queen Victoria's Poultry House*, a building of classic proportions, but too costly for a people of such stern-professing-Republican principles as ours. It represents little Vic. and her loving spouse, in the very commendable act of feeding their poultry—a practice, to their honor be it told, to which they are both very much addicted—a practice which, by example, cannot fail to be productive of the best effects, as it will doubtless become fashionable in the higher walks of life, not only in England, but here also, for ladies and gentlemen to attend to their own poultry; for who will not take delight in looking up eggs, feeding poultry and nursing sick fowls, when England's popular queen does each and all of these things with her own pretty eyes and hands, and is assisted in her notable work by that prince of Farmers, the good prince Albert. But badinage apart, we think the more of England's queen, because she has set so good an example; it at once speaks volumes in praise of her good sense and patriotism, as it teaches not only her own sex, but the sterner one, that it comports with the dignity of the first in the land, to personally attend to their business, and to do as little by proxy as possible. Besides the sketch of her majesty's Poultry House, Col. Bement has given a sectional sketch of her method of arranging the nests for the accommodation of the hens. In which arrangement, the Queen shews at once knowledge of natural history, love of economy, and cleanliness. "These nests are composed of dry twigs of heather and small brambles of hawthorn, covered over with the lichen. These materials, rubbed together by the motion and pressure of the hen, emit a light powder, the produce of the crushed leaves; and this finding its way between the feathers to the skin, was found to have the immediate effect of cleansing the bird of every description of parasite"—and in addition to this good effect, the boughs, which surround the nests, gratify the hen in her natural propensity for secretiveness.

There are various other cuts of Poultry houses, but the one we like best, is the Colonel's "own."

There is a cut too, descriptive of almost every known variety of fowls, which serve for the two-fold purpose, of

adorning the work, and enabling the reader to identify each particular kind as it may be presented to his view.

The book is divided into convenient chapters—one treats of Domestic Poultry, a second of the fecundity of hens—their expense and profit—a third of the best methods of fattening—a fourth of Poultry houses—an economy but two little understood, but which is illustrated with perspicuity by Mr. B.—a fifth of the furniture and accessories to the poultry house, exemplified by cuts—a sixth of Gallinaceous fowls—a seventh of domestic varieties—an eighth on the Pea-fowl and turkey varieties—a ninth on aquatic fowls—a tenth on the Duck—an eleventh on incubation, feeding and fattening—a twelfth on the Diseases of Poultry—and a thirteenth on miscellaneous subjects connected with the business of raising poultry.

The book is just what the Agriculturist wanted—it is just what every farmer and planter should forthwith possess himself of, and with the view of bringing about this consummation so devoutly to be wished, we here, by way of a side-whisper, say to farmers and planters' wives and daughters, see that your husbands and fathers purchase the book.

ORIGIN OF GUANO.

The following memoranda furnished by Dr. *Eights* to the editors of the Albany Cultivator will throw a gratifying light upon the origin of this manure, as the inquiring mind never fails to be interested in whatever tends to unfold what might otherwise be considered a mystery. Most writers have referred the origin of Guano to the accumulation for ages of the ordure of some species of aquatic birds; but there are others who, from the immense bodies of it found in deposit, ascribe it to a mineral origin. The observations of Dr. *Eights*, however, must strip the latter description of writers of all foundation for their theory, while it strongly corroborates the opinion formed by the first description of writers. But be its origin what it may, there can be no doubt of its vast power as a fertilizer of the soil:

Considering the extraordinary fertilizer which is now exciting wide-spread interest in the agricultural world, (and we may add, in the commercial world also, seeing that so many vessels are employed in the traffic,) we are indebted to Dr. *James Eights*, of Albany, for the following memoranda. The opportunities for observation presented by the Expedition—the first American Exploring Expedition—in which he was employed as Naturalist, certainly furnished ample scope for judgment on the subject to which Dr. *Eights* refers:—*Cultivator*.

"Much has recently been said," observes Dr. *Eights*, "and various have been the conjectures respecting the origin of the justly popular manure termed 'Guano,' bro't in such vast quantities from the numerous Islands and headlands of the African and South American coasts; but little or nothing of a definite nature has as yet I believe, appeared in print. All writers on the subject, however, seem to agree in considering it to be the production of some piscivorous birds.

As much uncertainty seems yet to prevail, permit me to cast my faggot on the pile, by offering to such of your readers whom it may concern, the substance of some extracts taken from my notes of a voyage, made several years since to the South Atlantic, Antarctic and Pacific Oceans; and likewise, some remarks from personal observations of at least one of the birds that largely contribute to its formation.

Being moored at the Island of St. Mary's on the coast of Chili, (latitude 37 south,) I was at an early hour in the morning, called on deck to witness the flight of "Shags," (*Phalacrocorax graculus*) on one of their fishing excursions to the sea; they appeared in such prodigious numbers, that the whole surface of the heavens was almost entirely obliterated from the sight; flying in irregularly formed streams from the main land, from the breadth of but a few feet to that of more than a mile the whole way, extending in a north and south direction along the coast as far as the eye had vision, strikingly bringing to my recollection the highly interesting descriptions of Wilson

and Audubon, of the multitude of wild pigeons in some of our western States. They continued in an almost unceasing flight from the time they were first observed, until we were summoned to our mid-day meal, after which time I paid no further attention to their progress.

The favorite resting places of these birds, were the southern headland of the Island, which arose in a precipitous manner from the waters of the sea to an elevation of about 90 feet above its surface, and likewise on the summits of the numerous rocky islets which were every where scattered about in its vicinity. Upon examination, these resting places were found to be entirely covered by well characterized Guano, but so firmly compact, and the surface of the rock so completely besmeared with the substance at their uniting edges, that it was next to an impossibility to determine with any degree of accuracy, its relative thickness.

These birds are esteemed as a palatable food, and for the period of three weeks that we remained at this island, they were daily served at mess for both officers and crew of the ship. Upon examining the contents of the stomachs of several of these birds, we almost invariably found them distended with the bones and partially decomposed relics of a small species of Clupea (Herring,) which range along this coast in immense shoals from the cold waters in the regions about Cape Horn to the immediate vicinity of the tropical line. These cormorants dive and swim well, pursuing and securing their prey while in the water; ascending in the air to devour it, which they do with the greatest facility, tossing it up and catching it again as it descends, they swallow it almost instantaneously in a head foremost direction. From their prodigious numbers, their voracious appetite, and exceedingly rapid digestion, a very large amount of these fishes are daily consumed by them. After having thus gorged themselves with food, they retire to their usual resting places on some projecting headland or rocky islet in the sea, where they remain for hours together, with outspread wings, until digestion has completed its course, when they again proceed to sea to renew the process. It is at such times that the Guano is so copiously deposited.

This species of cormorant has a great geographical range, being found along both continents, from the frozen regions of the north, to the Antarctic sea, and of course are not uncommon along our whole Atlantic board, but in consequence of the frequent and copious rains which fall in these latitudes, the guano is unable to accumulate, being dissolved and washed away almost as rapidly as it can be produced.

Penguins likewise, have frequently been mentioned as contributing largely to the formation of guano, but from the peculiar habits of the various species of these birds it will be readily seen that but a comparatively small portion of this substance can justly be attributed to them. In the warm climate of the Peruvian coast where this manure chiefly abounds and where rains are seldom, if ever known to fall, these birds are relatively of rare occurrence, but gradually increase in number in proceeding to the south, until the antarctic seas are reached, in the cold waters of which, they in the greatest profusion are found, being not unfrequently observed, covering the surfaces of its numerous icebergs which are every where to be seen drifting along at a rapid rate by the power of the winds and the velocity of the currents.

These birds are also of an aquatic nature, spending the greater portion of their existence in the open sea, visiting the land only for the purposes of moulting, hatching, and rearing their young, which certainly does not exceed 3 months in the year. In the high latitudes where Penguins most abound, guano is exceedingly scarce.

From the facts here stated, and the circumstance that no piscivorous birds are so numerous in the regions where guano is found in the greatest profusion, as the *Phalacrocorax graculus*, I consider myself fully justified in the conclusion, that it is by these birds that this truly valuable manure is almost altogether produced."

To the Editor of the American Farmer:

SIR: Altho' I do not consider myself bound to reply to anonymous writers, yet the letter from Carroll county, signed "S." in your paper of the 4th inst. is so courteous that I will depart from my rule and beg to refer him to my communications in your paper of the 31st July and the 4th Sept.; in both of which I particularly mention the duty of 20 per cent. ad val. to which guano is subject on importation into the United States.

I beg also to acquaint him that I am not ignorant of the

fact that guano is subject to a duty of one shilling per ton only on importation into England; but this difference in the duty will make only an insignificant difference in the relative cost in the two countries—not a "considerable" difference as he supposes.

I am sorry that the words in my last letter "something resembling extortion" grated harshly upon the ears of this gentleman; his rebuke is a mild one, and perhaps I ought not to call things by their right names, but have thus expressed myself: "in the true spirit of monopolists," &c.; and even this expression I will abandon the moment the monopolists supply us with guano at the same price they supply both French and English farmers—namely 2½ cts. per lb. May I ask "S." whether, supposing I have made good my position, that Guano is sold in Liverpool by these parties at 2½ c. per lb. and in Havre at 2½ c. per lb. he can assign any reason except the difference of duty, why American farmers should pay these monopolists a higher price for their article than English or French farmers?

S's query will be replied to in the affirmative by every friend to agriculture as well as by agriculturists themselves: I trust he will set an example to us in his own county, and I promise to follow it.

I am, sir, yours, respectfully,

FRAS. FINCH.

For the American Farmer.

Mr. Editor.—Believing it to be the duty of every farmer to convey to his brethren any item of information that he may become possessed of, which may be of service in agricultural operations, I am urged to give you the burden of a conversation held a few days ago with an intelligent farmer from Tompkins County, New York, in reference to the application of plaster to clover. He informed me that in his experience, and it was generally observed in his neighborhood, "the sowing of plaster on clover was attended with far more beneficial results, if done in dry weather, in the spring, and after the falling of the spring rains." If any of your subscribers in Maryland, or elsewhere, have noted the like effect in their practice, would it not be well for them to inform the agricultural community of it through your columns.

J. C. W.
Harford County, Md. 14th Dec. 1844.

DESTRUCTION OF THE APHIS AND SHEEP TICKS.—A writer in the Mass. Ploughman says he has succeeded well in killing the aphis or plant louse on trees and shrubs, by smoking them with tobacco, mixed with a small quantity of brimstone. The smoking did not injure the leaves or stem. His process of smoking is simply to take one of those boxes in which ground mustard comes packed (say half pound boxes) in the lid of the box, have a tube soldered in, of such size as will fit on to the nose of a bellows; in the bottom of the box put another tube similar to the one in the lid, fill the box with tobacco, (no matter how poor,) turn into the box a little water to prevent the tobacco from burning too rapidly, put in a coal of fire, fix on the lid which is attached to the bellows nose; you can then smoke them to your liking.

Simple Cure for Croup.—We find in the Journal of Health the following simple remedy for this dangerous disease. Those who have passed nights of almost agony at the bedside of loved children will treasure it up as an invaluable piece of information. If a child is taken with croup, instantly apply cold water, ice water if possible, suddenly and freely to the neck and chest, with a sponge. The breathing will almost instantly be relieved. So soon as possible let the sufferer drink as much as it can; then wipe it dry, cover it up warm, and soon a quiet slumber will relieve the parent's anxiety, and lead the heart in thankfulness to the power which has given to the pure gushing fountain such medicinal qualities.

MANURES.—A correspondent states that last year he manured three beds of Myatt's Pine Strawberry, as follows: 1, with nitre of soda; 2, with guano, and 3, with bone-dust. He remarked no difference in produce last year, but this year, the bed to which the bone-dust was applied, is much the best.—*Gard. Chron.*

Extraordinary Yield of Squashes.—Mr. Benjamin Weld, of Roxbury, informs us that from one vine of the Valparaiso squash, he gathered 11 squashes, weighing as follows: 84 lbs., 73, 69, 62, 59, 58, 44, 27, 22, 20, 10—making a total of 528 lbs., which sold for \$5 on the ground.—*New England Farmer.*

FALL FEEDING.—Excessive feeding of grass lands, either in spring or fall, is an evil that ought to be avoided. Not only is it a most serious detriment to the grass, which is thereby more fully exposed to the vigorous action of frosts, but it is also a serious evil in other respects. As the soil at such times, is almost invariably wet, the trampling of heavy cattle and horses necessarily operates as a most painful detriment to the mower,—the action of the animal's hoofs causing innumerable inequalities in the surface, thus defacing the field, and creating serious obstacles to the successful operation of the scythe. Where there is a luxuriant aftermath, and the texture of the soil is sufficiently compact in its texture to resist the weight of the animals, moderate feeding, is perhaps, no injury. The practice, however, is generally going out of fashion, among good cultivators, whose disapprobation, resulting from observation and experiment, stamps it as one of the long descended usages which are fated to be recorded ere long on the page of agricultural improvement, among the things that were.—*Maine Cult.*

THE WOOL TRADE.—According to the best calculations, says Mr. Williams, in his admirable address on the Tariff, it is supposed that there are about 34,000,000 of sheep in the United States, worth on an average about \$2 a head, and yielding about 90,000,000 pounds of wool, worth at 30 cents per lb., about \$27,000,000. These sheep at three to the acre for summer and winter, would require 11,333,333 acres of land for their support, which at \$12 per acre, which is considered a fair average, would be worth \$136,000,000. To manufacture this clip of wool will require about 45,000 hands, who with families averaging three persons each, and amounting in all to 180,000, at a consumption of \$25 per annum each, would require \$4,500,000 worth of agricultural products for their support, which, at a net yield of \$2.50 per acre for the market, would require 1,800,000 acres of land, worth at \$12 per acre, \$21,600,000. The capital invested, then, by the farmer in this business alone is about \$225,000,000, and the annual value accruing to him, about \$1,500,000, while the capital stock invested by the manufacturer himself in building, machinery, &c., to work up the whole annual product would not perhaps exceed \$45,000,000 or about one-fifth of that of the agriculturist's.—*Maine Cult.*

CORNSTALK SUGAR.—The manufacture of sugar from cornstalks, promises to become an extensive and profitable branch of business at the West. Mr. John Beal of New Harmony (Indiana), has made 395 pounds of good sugar this season, from the cornstalks that grew on three quarters of an acre. This is at the rate of 500 lbs to the acre. His plan is thus briefly noticed in the *Cleveland Herald*:—"When the ears begin to form they are pulled off. When the leaves are dead, about half way up the stalk is stripped of leaves, cut up at the root, the top cut off; and then ground in a sugar mill. Twenty stalks will yield about 1 pound of sugar. Mr. B. made 80 lbs. in a day, with a simple apparatus of his own construction.—Five hundred pounds, at 4 cents per pound, is \$20 per acre. It would have produced, say 50 bushels of corn, at 25 cents, \$12.00."

IMPROVED FARMING IN VIRGINIA.—Mr. H. R. Robey, near Fredericksburg, Va., gives us the following favorable account of the effect of agricultural papers in improving husbandry of his neighborhood:—"When I commenced farming, I determined to try the new system of husbandry, because I saw the old plan would not do; the farmers were all going backwards, or getting poorer every year; my new neighbors laughed at me, when they saw me occupying so much of my time in mud and sods from the swamps to put in my manure pile, and asked where I got the notion from. My reply was from the *Cultivator*. They laughed still more, and called me the book farmer; said I would soon find out my own folly and go back to the good old custom, as they called it. Many of those men have acknowledged since that I have been pursuing the right plan. I have now eight barrels of corn growing where some six years ago one barrel could not be grown; and all my information has been derived from agricultural papers. Some of my neighbors for two or three years past have been taking the *Cultivator*, and you can perceive an improvement upon the farms already. They are not now content to put up with the bare necessities of life. A spirit of improvement seems to have taken hold of them; they begin to cultivate improved varieties of

fruit for market and for their families; thus adding profit and pleasure, where neither could be found before they began to read agricultural papers."—*Cultivator*.

A VIRGINIA HOMESTEAD.—The editor of the Cincinnati Herald is travelling in Virginia. He thus describes an ancient domicile in Sussex County.

"Dickens complained when in this country, that everything looked new. Had he visited Virginia his taste for the ancient might have been gratified. I sit now in the attic of one of these old peaked roof domiciles, so common in this part of Virginia—unpromising on the outside, but inside, full of hospitable cheer. It is of only about ninety years standing; and was never painted. Its corner cupboard and old-fashioned secretary are highly venerable. Nothing can exceed the neatness in the interior of one of these aged dwellings. The floors are polished and without stain—every old-fashioned rush bottom chair is in its place. Not an atom of dust rests upon any thing. The beds, with their pure white, beautifully wrought counterpanes, almost make you feel drowsy. Every thing is clean, still and steadfast. The owner of this tenement, an old man aged eighty-six, of great moral worth, died a few weeks since, and is now the tenant of a small family grave yard, just in sight, ornamented by four or five fine cedar trees. For sixty-one years without change, or thought of change had he occupied this dwelling; and there now lies before me a book of Common Prayer nearly a century old, containing the family record since 1735. Every thing about me has a grave aspect, which is enhanced by the saddening sight and sounds of autumn.—On my way here this morning, we passed through a forest of pines. In 1819, said a venerable old lady, this was planted in corn. Just in my eye, are two tenements, deserted. The plantations will soon be covered with pine, which seems to delight in relieving desolation. I like pine forests; my first breath was drawn amid their shadows, and when a boy, nothing was more pleasant than to dive into their cool and fragrant depths. The wind never makes such music as when it sighs through their peculiar foliage."

"Much increase is by the strength of the ox."

[Prov. xiv. 4.]

The following in substance, is Dr. Adam Clarke's just commentary on this passage of Holy Writ. The ox deserves more consideration than he usually receives, for the reasons here so correctly given: "The ox is the most profitable of all the beasts used in husbandry. Except merely for speed, he is superior in almost every respect to the horse. 1. He is longer lived. 2. Scarcely liable to any disease. 3. He is steady, and always pulls fair in his gears. 4. He lives, fattens, and maintains his strength on what horses will not eat, and therefore is supported at much less cost. 5. His manure is more profitable. And, 6. When he is worn out in his labor, his flesh is good food for the nourishment of man, his horns of great utility, and his hide invaluable. It might be added, he is almost no expense in shoeing; and his gears are much less expensive than those of the horse. In all large farms, oxen for the common purposes of labor, are greatly to be preferred to horses. Have but patience with this most patient animal, and you will soon find there is much increase by the strength and labor of the ox."

It is the opinion of some very judicious farmers, that a given quantity of ground will afford more nutriment for any kind of stock, when appropriated to apple trees, than when devoted to any other crop. Our own experience inclines us to favor this conclusion, and we think our friends who, for the promotion of temperance, have cut down their orchards, have shown a "zeal not according to knowledge." They seemed not to be aware that the same substance which produced the deleterious effects that they desired to avoid, might be converted into wholesome and substantial articles of human subsistence.—*Alb. Cultivator*.

Blight in Pear Trees.—A friend has just mentioned to us a remedy for this formidable disease in pear trees, which he has found effectual. On discovering the blight, which had become very general on his trees, he immediately cut off the branches it most affected, then scraped the bark from the trunk and limbs thoroughly, to the live bark, and applied a strong ley from wood ashes. Although the bark bled profusely in many places, and was

turned to a dark brown on applying the ley, the trees immediately put out deep green leaves, and have since been entirely recovered. The common ship-scraper was made use of in scraping the trees.

The result of the above treatment would seem to indicate, as has been latterly asserted, that blight is owing to a minute insect concealed within the bark. We should be highly gratified by the reception of any communications on this subject, proving more fully, if possible, whether we are correct in our supposition.—*Amer. Ag.*

PLANTING TOO MUCH COTTON.—The following remarks, says the Savannah Republican, from the Hamburg Journal are not a whit less sensible because briefly and plainly expressed. Our planters would indeed do well to reflect seriously upon this subject. Pursuing their present course of overproducing cotton, they ought not to anticipate anything but short prices and pecuniary embarrassments. The result of the recent election, by increasing the probabilities of annexation, and the enlargement of our cotton producing territory will only tend to aggravate these evils. Depreciation of the prices of both lands and negroes, and ultimate ruin must be the result, unless the difficulty is met, as was suggested, by a diversion of labor. The Editor of the Journal, says:

"Planters of the South, can you raise cotton at present prices? If the great improvement in agriculture of late, and the cheapness of labor, will warrant the pursuit of this employment, well and good; but if, on the contrary, this is not the case, you should reflect on the matter, and cast about for a more suitable investment of labor, capital, and time. You are aware that the western lands, and those of Texas, will repay the planter more at five cents or even less, than our lands will at six cents; and yet you drive on in one long train of toil every year, without counting the cost of these things.

"What then is to be done, you will ask?—Plant less of the staple, raise more provisions, live more at home, improve your lands and stock, and let your farms present an appearance of industry, thrift, and plenty. This is a great country, and all we have to do, is to use exertions in making it beautiful, and ourselves happy and independent, as much as possible, of other countries. Be sure that you have a sufficiency at home, and then send off the surplus. Patronize home industry in all its various branches, and then we shall become a thriving and contented people."

We have often smoked sheep with an apparatus like this, to kill ticks. In the winter or spring when the wool is long, and the weather too inclement to justify dipping sheep in liquid, smoking is the best plan that can be resorted to, and if well done, is quite effectual. Smoke seems to be very deadly to insects in general, and we do not see why it may not be used to good advantage in killing plant lice.—*Albany Cultivator*.

Agriculture in China.—Agricultural implements have been discovered among the Chinese which were supposed to be only known to European and American nations, such as ploughs, common harrows, winnowing, and even threshing machines. Added to these, there is no considerable field which does not possess its chain-pump for the purpose of watering the crops from the lower levels with small labor to themselves.

APPLES FOR STOCK.—*Messrs. Editors:*—Much has been written and said on the virtue of apples as food for stock. As far as I have practical knowledge of the benefit of apples for stock, I consider them of considerable value. A few seasons ago I had a cow which was in rather poor state of flesh in the spring which I intended for beef. I left off milking her in May and kept her with my stock until about the month of September.—I then put her in an orchard of about two acres, the apples then had commenced falling from the trees, of which she had a good supply. She would not drink any water when she had a good supply of apples, and that was generally. She remained in the orchard about two months; and I think I never saw a cow fat faster. Then I was satisfied they were profitable food. This fall, since the feed in my pasture has begun to be short, I have given my milch cows freely of apples, and they have not increased in the quantity of milk as I should have expected. I therefore think they do not increase the quantity of milk so much as other kinds of food, such as pumpkins, cabbage leaves, and roots. I also commenced picking up my windfall apples

as soon as they began to fall from the trees, and have followed giving them to my hogs freely. Sometimes in a raw state, but generally steam them;—they also receive the milk from the dairy, with a few boiled pumpkins and potatoes, which composes their food, which they relish well, and fat fast, and are good porkers. And I intend to keep my pigs almost wholly thro' the winter on apples. When cider apples are as plenty as they are this season, and are hardly worth giving away, they may be used for cows and hogs to good advantage.—Whether apples kept from freezing, and given in a raw state are the best for hogs, or left to freeze and then steam them, I am not prepared to say. Perhaps some of your correspondants can inform you.

Yours, respectfully,
Hallowell, Nov. 4th, 1844.

ALDEN RICE.

[Maine Cultivator.]

SALT AS A FERTILIZER.—Statements in regard to salt, when applied to the soil, are quite various, and sometimes contradictory. Some accounts would lead us to suppose that its operation is highly beneficial, while others seem to show that its effects have been of an opposite nature.

In a paper read before the N. Y. Farmer's Club, by F. MORTIMER BUTLER, Esq., a copy of which we find in the Farmer and Mechanic, is some interesting suggestions which tend to reconcile former discrepancies, and perhaps show the true theory on this subject.

Mr. Butler entertains the idea, that for salt to act beneficially, it is necessary that it should be combined with lime, or calcareous earth—that "whenever salt and lime have been used together, the effect has been good; while on the other hand, when either is used alone, there is need of some other governing material, or the effect is not good." Mr. Butler supports this conclusion by reasoning on the chemical properties of salt and lime—by reference to the several writers who speak of the beneficial effects of the two substances when mixed together—and by some facts which had fallen under his own observation. From an investigation of this subject, he was prompted "to use salt upon a field which had been rendered caustic by an injudicious application of lime. Buckwheat, sown upon this field, had its roots so scorched that the three acres yielded but four bushel of seed." Grass seeds were sown three several times on the field, but, he observes, "did not take well, excepting in one spot, where a single load of yard manure had been strewn; this governed the lime; the Timothy grass came in, and grew full five feet high."

"At this period," (says Mr. Butler) "coming into charge of the field, I sowed it with about one bushel of fine salt to the acre; in less than about two weeks time the clover and timothy came in plentifully, and did well, field pastured."

In conclusion, Mr. Butler says—"the agricultural facts that have come to my knowledge have shown me, that salt has succeeded best upon lands previously limed at the time of its own application. Salt, even when accompanied with lime or the carbonate of lime, must not be depended upon for a crop in the absence of a due supply of organic matter. Salt is but a corrective when decomposed in the earth, it then acts as an alkali, or in other words, the beneficial results that follow its decomposition, depend upon the action that the liberated alkali (soda) exercises upon the organic matter of the soil."

[Albany Cultivator.]

REAPING MACHINES FOR 100 DOLLARS.

Suited to ground cultivated in corn lands as well as fallow. This is my latest improvement. Every objectionable trait in my former machines have been removed in the construction of the present one. It is warranted to cut as much in a day, and with far greater ease to both horses and men, than any I made previous to 1841. I have delayed to announce this until I had ascertained the facts from those who used them in the last harvest. For the satisfaction of the doubtful, I refer to Wm. Butler and Jacob Steley, of Shepherdstown, Va. My large Machines with forward wheels, are made as usual at 170 dollars.

Machines of medium size, will be made to order at 140 dollars. Corn Shellers and Huskers, at \$35, Corn and Cob Crushers, improved at \$25a\$35.

Baltimore, Nov. 20, 1844.

OBED HUSSEY.

no 20

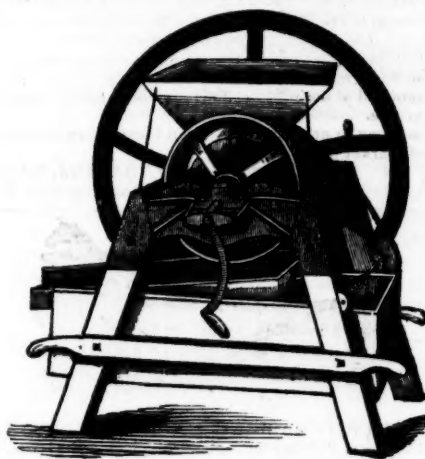
GUANO—Farmers, Now's your time.

The subscriber has received 80 sacks of GUANO, which he will sell at \$3½ a hundred if immediately applied for.

D. B. DICKINSON,
Corner of Bond and Lombard sts. or,
LEWIS GROSS, Jr.
No. 85 Smith's wharf

July 24

R. SINCLAIR, JR. & CO'S. PATENT CORN MILL.



The above cut represents Sinclair & Co's. new Corn Mill, which is admirably adapted for plantation use, or as a Maryland planter says of them, "every planter having this useful machine becomes his own miller." They grind coarse or fine meal with equal facility, perfection and despatch, at the rate of 24 or 3 bushels per hour.

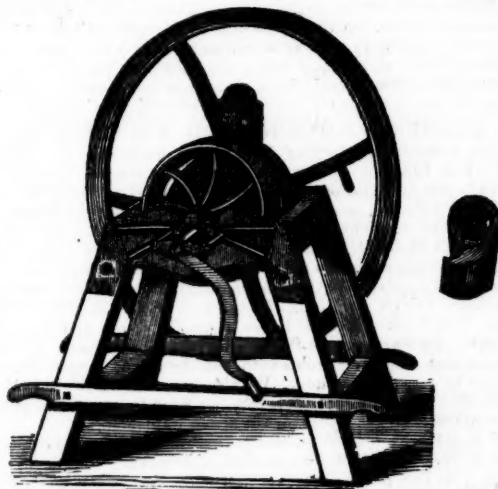
When the screen is attached (as shown in the centre of the cut) and fine meal is required to be ground, it will be necessary to drive the Mill by horse-power, (say 2 horses) coarse meal for horses may be ground by two men with good success.

The grinding plates, which are made of the hardest composition metal will last about two years without renewing, after they are worn smooth new ones may be put on without difficulty. A feeder is attached to the axle which is intended to pass the grain into the plates at regular intervals. This feeder is important and obviates the difficulty and objection to Cast Iron Mills generally.

Price, with one set extra plates, \$40.
The feeder and grinding plate (as above) are represented separate from the Mill.

No 8

SINCLAIR, JR. & CO'S. CORN & COB CRUSHER.



The above cut represents Sinclair & Co's. Corn and Cob Crusher, which is admirably adapted for plantation use, the construction is very simple, compact, and not easily put out of order. The grinding plates are made of the hardest composition metal, which will last from two to three years. After they are worn smooth new plates may be substituted without difficulty; on the axle is attached a strong spiral knife, which cuts the cob in small pieces, preparatory to entering the plates.

Two horses will crush and grind 8 bushels per hour, fine enough for feeding to cattle. Two men can work this machine with good success.

Price with one set extra plates, \$30. The materials used and the performance of the above, is expressly guaranteed.

R. SINCLAIR, Jr. & Co.

62 Light street.

The knife (as above), the grinding plates similar to that of the Corn Mill.

no 20

GROUND PLASTER.

The subscriber is now engaged in the grinding of Plaster of Paris, for agricultural purposes, and would respectfully inform Farmers and dealers that he is prepared to furnish it of the best quality at the lowest market price, deliverable in any part of the city, or on board Vessels free of expense, application to be made at the Union Plaster Mill, near the Glass House, or at the office No. 6 Bowly's Wharf, corner Wood street.

P. S. CHAPPELL, or,
WM. L. HOPKINS, Agent.

BALTIMORE MARKET, Dec. 17.

Beef, Balt. mess, 8a	Butter, Glades, No. 1, 113
Do. do. No. 1, 7a	Do. do. 2, 7a11
Do. prime, 5a	Do. do. 3, 5a7
Pork, mess, 9	Do. Western, 2, 6a
Do. No. 1, 8½	Do. do. 3, 5a6
Do. prime, 8	Lard, Balt. kegs, 1, 6½a7
Do. cargo, a	Do. do. 2, none
Bacon, hams, Ba. lb 6a7½	Do. Western, 1, a6½
Do. middlings, 4½a5	Do. do. 2, 5a5½
Do. shoulders, 4½a5	Do. do. bis 1, 6a6½
Do. ass'd, West. 4½	Cheese, casks, 6
Do. hams, 5a7	Do. boxes, 5a8½
Do. middlings, a5	Do. extra, 12a15
Do. shoulders, 3½a4	

COTTON—

Virginia, 9a10	Tennessee, lb.
Upland, 6½	Alabama, 11a12
Louisiana, 11½	Florida, 10a12
North Carolina, 10a11	Mississippi

LUMBER—

Georgia Flooring 12a15	Joists & Sc'ling, W.P. 7a10
S. Carolina do 10a12	Joists & Sc'ling, Y.P. 7a10
White Pine, pann' 125a27	Shingles, W. P. 2a9
Common, 20a22	Shingles, ced'r, 3.00a9.00
Select Cullings, 14a16	Laths, sawed, 1.25a 1.75
Common do 8a10	Laths, split, 50a 1.00

MOLASSES—

Havana, 1st qu. gl 30a31	New Orleans 31a
Porto Rico, 29½a	Guadaloupe & Mart 26a28
English Island, 29½a	Sugar House, 28a36

SOAPS—

Baltimore white, 12a14	North'n, br'n & yel. 3½a4½
brown & yell'w 4½a5½	

TOBACCO—

Common 2 a 3½	Yellow, 8 a10
Brown and red, 4 a 5	Fine yellow, 12a14
Ground leaf, 6 a 7	Virginia, 4 a 9
Fine red 6½a 8	Rappahannock, 3 a
wrappery, suitable	Kentucky, 13 a11
for segars, 8a13	St. Domingo, 15 a38
Yellow and red, 7a10	Cuba, 15 a38

PLASTER PARIS—

Cargo, pr ton cash 2.75a [Ground per bbl. 1.12a

SUGARS—

Hav. wh. 100lbs 9a10.50	St. Croix, 100lbs 7.00a8.00
Do. brown a7.50	Brazil, white, a
Porto Rico, 5.50a6.40	Do. brown, 29c. per lb.
New Orleans, 5.55a	Lump, lb. c.

FLOUR—We quote

Superfine How. st., from stores, bl 4.12.	
Do. City Mills, 4.25.	
Do. Susquehanna, 4.25.	
Rye, first 3.75a	
Corn Meal, kiln dried, per bbl. 2.25	
Do. per hhd. 11.75	

GRAIN—

Wheat, white, p bu 95a100	Peas, black eye, 50a55
" best Va red 89a	Clover seed, store 4.06a
" ord. to pri. Md 57a87	Timothy do 2a2.25
Corn, white, 38a	Flaxseed, rough st. 1.18
" yellow Md. 39a40	Chop'd Rye, 100 lbs. 1.25
Rye, Md. 67a	Ship Stuff, bus. 20a
Oats, Md. 27a28	Brown Stuff, 15a
Beans, 101	Shorts, bushel, 10a

FEATHERS—per lb.

Havana, 7 a 8	Java, lb. 10 a12
P. Rico & Laguay, 5½a6½	Rio, 6½a7½
St. Domingo, 5½a 6	Triage, 3½a 4½

CANDLES—

Mould, common, a10	Sperm, 30a31
Do. choice brands, 10½	Wax, 60a65
Dipped, a 9	

BEMENT'S AMERICAN HOTEL, No. 100 State

Street, Albany.

Is now open for the reception of company, having undergone a thorough repair and complete renovation from the cellar to the attic. It has been newly furnished throughout, and in quality of beds, cleanliness, and airy rooms, will now compare with any other establishment in the city.

In location, this House has many advantages, being situated in the centre, and on one of the most beautiful streets in the city; within a few moments' walk of the Eastern and Western Railroad Depots and the landing of the Steamboats; about midway between the Capitol, Public Offices, and the Banks, Post Office, and the business parts of the city. renders it very convenient for the man of business, as well as gentlemen of leisure.

The subscriber places much reliance on the countenance and support of the AGRICULTURISTS throughout the Union, who may visit the city, and pledges himself to spare no exertions to render their stay agreeable, should they favor him with their company.

Three Halls Farm will be carried on as usual, under my own superintendence, by a careful manager, and the breeding and rearing improved stock will be continued as heretofore.

Albany, July, 1844.

C. N. BEMENT.

GRAIN CRADLES! GRAIN CRADLES!

We mean what we say when we assert that A. G. MOTT, corner of Ensor and Forest sts. Old Town, near the Bel-air market, is now making up, and has for sale, the very best and cheapest article of the kind in the Baltimore market, and no mistake. Try them

BERKSHIRE BOAR.

A fine Berkshire Boar, 12 months old, of pure stock, for Sale—Price \$10—He is a very fine animal. Also some half-bred Berkshire Pigs—Apply at this office.

DEVON BULL FOR SALE.

He is of the best breed, very gentle, 4 to 5 years old. The owner having another for his own service, has no use for him, and he will be sold a bargain. Apply at this office. de 18

DISSOLUTION.

The undersigned have sold out their entire interest in the "Bommer Manure Method" to Mr. George Bommer, of New York; in consequence of which the partnership heretofore existing between us was dissolved on the 6th ultimo by mutual consent.

Our agents are requested to make up their accounts to the 6th of November, and forward them to Thos. M. Abbett, Baltimore, who is solely authorized to settle.

For any transactions after that date they will account to Mr. Bommer.

TH. M. ABBETT,
CHARLES BAER,
JOHN GOULIART.

Baltimore, Dec. 14, 1844.

N. B. Charles Baer is the General Agent for Mr. Bommer in Georgia, and John Gouliart his General Agent for the State of Maryland. de 18

THE BOMMER MANURE METHOD.

We wish to afford every facility to the introduction of this method, as the better it is known the higher it will be esteemed. If farmers who are living in a neighborhood will club together, we will offer them the following inducements to purchase, viz. To any club of Five ordering the method to one address, we will make a deduction of 15 per cent. To a Club of Ten, 20 per cent. reduction, and to larger clubs, a still larger discount upon our established rates for single methods, which are as follows:

For a garden up to 20 acres,	\$6
" 100 acres arable land,	10
" 200 " " "	15
" 300 " " "	18
" 400 " " "	20
Unlimited number of acres,	25

Purchasers of a smaller right can at any time increase it by paying the difference in price.

Those who find it more convenient, can leave their orders with S. SANDS, at the office of the American Farmer, who will promptly attend thereto. mh 13

1000 APPLE TREES FOR SALE.

Just received from Samuel Grey's Nursery in Chester County, Pennsylvania, 1000 young thrifty Apple Trees, of assorted and choice varieties, which will be sold very cheap.

Immediate application is necessary, as now is the time for planting them. J. S. EASTMAN.

de 4

Ptatt Street.

AGRICULTURAL IMPLEMENTS.

J. S. EASTMAN, at No. 36 West Pratt st. about half a square west of the Baltimore and Ohio rail road depot, has on hand a great variety of Plows and Plow Castings, and other Farming Implements at wholesale and retail, as follows, viz. his newly patented Cleazy self-sharpening plows of 7 different sizes, (and one large left hand do) he has many testimonies to show the superior merits of this implement.

Also—Gideon Davis' improved ploughs, of all sizes, wrought and cast shares, do do. Connecticut improved, a superior article for light soil; Evans' reverse point ploughs, with cast shares only; Wyman's No. O. self-sharpeners, various bar-share and coulter ploughs and superior side ploughs, etc. etc. Also, corn and tobacco Cultivators, wheat fans, cylindrical straw cutters of various sizes, a superior article; lime carts, superior Pennsylvania made grain Cradles; small Burrstone Mills for driving by horse-power or steam; Corn Shellers, Threshing Machines (and horse-powers for two or four horses) made very durable and to thresh clean. Bachelier's and Osgood's patent corn planters, etc. with a great variety of other implements made of the best materials and in the best manner. All the above are sold at reduced prices to suit the times. may 1

FOR SALE—4 full bred DURHAM BULL CALVES, from one to three months old—sired by an imported bull Magnum Bonum—who took the premium at the two last cattle shows. Enquire of SAMUEL SANDS. June 5

AGRICULTURAL MACHINERY,

Manufactured by Robt. Sinclair Jr. &

Co. No. 60 Light street, viz:

Corn Mills,	price \$40	most approved)	8 to 12
Sinclair & Co's Corn and		Subsoil Ploughs,	8 to 12
Cob Crushers,	30	Other kinds, embrac'g about	
Baldwin's do.	65	25 sorts, and suited to every	
Goldborough's Corn Shell-		variety of soil,	2.50 to 13
ing & Shucking Machine,	35	Corn & Tobacco Cultivat.	5 to 6
Hand do. assorted,	15 to 17	Harrows,	6 to 16
Vegetable Cutters,	20	Grain Cradles & Scythes,	4 to 5
Threshing Machines,	40 to 60	Plough and Machine Cast-	
Horse Powers,	75 to 100	ings,	per lb. 4 to 5
Cylindrical Straw Cutt.	25 to 45	Fanning Mills,	25 to 30
Do. extra large,	75	Horse Hay Rakes,	11
Common Straw Cutters,	5 to 12	Grindstones, on friction rol-	
Bottle & Green's do.	25 to 30	lers,	13
Pierce's and Dolphin self-		Lime Spreaders,	30
sharpening Plows, (new &			

Ploughs and Machinery REPAIRED on reasonable terms. Also

GARDEN AND FARMING TOOLS—of every sort.

GARDEN AND FARMING SEEDS

GARDEN AND FARMING BOOKS

The agricultural community will find it their interest to examine our stock of Implements, Seeds, &c. We promise purchasers police attention and lowest market prices. R. S. Jr. & Co.

GUANO.

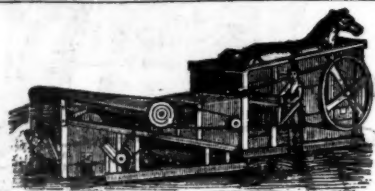
The Agent for the sale of the genuine Peruvian Guano, in the U. S., offers the same for sale at prices stated in his advertisement in quantities of ONE TON AND UPWARDS—Farmers and others wanting LESS than a ton, can be supplied by the subscriber at \$34 per 100 lbs. deliverable at the warehouse, in any quantity, or shipped on board any vessel in the port, drayage added. Samples can be examined at our office. This may be depended upon as the genuine article.

Those wishing to procure the African Guano, can be supplied at the lowest market price. Address

SAMUEL SANDS,

de 11

at the office of the American Farmer.



WHITMAN'S THRASHING MACHINE & HORSE POWER DEPOT, No. 2 Eutaw st., opposite the Eutaw House, where the subscriber now offers for sale all his new improvements in the Thrashing-machine and Horse-power line, consisting in part of his new SEPARATOR, patented March 20th, 1844, which thrashes and cleans the grain at one operation, and is considered the greatest labor saving machine, and of the most value to the farmer of any machine ever invented in this country.

NEW STRAW CARRIERS—These machines thrash and separate the grain from the straw in a rapid and perfect manner, and are highly approved by all.

Improved CYLINDER THRASHERS—Warranted to thrash faster than any other kind of thrashers that can be produced.

Improved HORSE POWERS, on the rail-way principle, for one or two horses. These machines are durable, possess double the power of the common kind, and occupy about one eighth of the room. All of the above are made of the best materials, by experienced workmen, and warranted. I will furnish a man to go out with them and set them up in any part of this State, if desired.

As this is no humbug, all who feel an interest in agriculture are respectfully invited to call and examine for themselves.

All orders addressed to the subscriber, Baltimore city, will meet with prompt attention. EZRA WHITMAN. Jr.

de 17

TEN DOLLARS REWARD.

The above reward will be paid for the delivery, to Dr. Woodside, at the Baltimore and Ohio rail road depot, of a fine DURHAM HEIFER, between two and three years old, of fine size and in good condition. This heifer was brought from Philadelphia on the steamboat, and escaped, it is supposed, from the boat after her arrival in Baltimore, on Saturday, the 19th of October last. Her color is principally white, but with spots of roan interspersed over the body, and a strawberry roan head and neck. She is very gentle, and had on, when lost, a leather halter, fastened together with iron rivets; and likewise a piece of new grass rope tied round the neck. no 20 t

CHARLES B. CALVERT.

FARMERS! EXAMINE FOR YOURSELVES!

The well selected stock of implements belonging to JAMES HUEY & CO. No. 7 BOWLY'S WHARF, Baltimore. Our stock consists of a large lot of PLOUGHS, SHEARS, POINTS, and CULTIVATORS, which we will sell low to suit the times—among which rank the economical WILEY, and the MINOR & HORTON PLOUGH of the N. York composition metal and manufacture—the share has a double point and edge, equal to two shares and points. We keep on hand all kinds of PLOUGHS, premium CORN SHELLERS, HAY & STRAW CUTTERS, Corn & Cob CRUSHERS, Horse RAKES, Corn and Tobacco HOES. Farmers and Planters on the Eastern and Western Shores may send their orders with confidence, as they will be attended to with promptitude. We also keep GARDEN & FIELD SEEDS. Thankful for past favors, we hope to merit a continuance of the same. Agents for the above implements, S. L. STEER, Market st. near the corner of Paea, Baltimore E. & W. BISHOP, Bel-air market, Baltimore. fe 28

PORTABLE TUBULAR STEAM GENERATOR.

The undersigned successors to the late firm of Bentley, Randall & Co. are manufacturing, and have constantly on hand a full assortment of the above Boilers, which within the last few months have undergone many improvements: we can now with confidence recommend them for simplicity, strength, durability, economy in fuel, time, labor and room, to surpass any other Steam Generator now in use. They are equally well adapted to the Agriculturist for cooking food for cattle and hogs, the Dyer, Hatter and Tanner for heating liquors, to Manufacturers (both Cotton and Woollen) for heating their mills, boiling sizing, heating cylinders, &c., to Pork Butchers for heating water for scalding hogs and for rendering lard, to Tallow Chandlers for melting tallow by circulation of hot water (in a jacket,) to Public Houses and Institutions for cooking, washing and soap making, and for many other purposes for all of which they are now in successful operation; the economy in fuel is almost incredible; we guarantee under all circumstances a saving of two thirds, and in many instances fully three fourths—numerous certificates from the very best of authority can be produced to substantiate the fact. We had the pleasure of receiving the premium for the best Steam Apparatus at the Agricultural Fair held at Govanstown in October 1843.

Manufactory, McCausland's old Brewery, Holliday st. near Pleasant st., Baltimore, Md.

Dec. 6. t

RANDALL & CO.

JAMES MURRAY'S

PREMIUM CORN AND COB CRUSHERS.

These already celebrated machines have obtained the premium by a fair trial against the other Crushers exhibited at the Fair held at Govanstown, Balt. co. Md. Oct. 18th, 19th and 20th, 1843, and the increased demand enables the patentee to give further inducements to purchasers by fitting an extra pair of grinders to each machine without extra charge. Prices \$25, 30, 35, 40, 45.

ALSO, small MILLS, which received a certificate of merit, for \$15.

I have also superior CUTTING BOXES, such as will bear inspection by either farmers or mechanics.

Also, Horse Powers, Mills, Corn Shellers, Mill and Carry-log Screws, small Steam Engines, Turning Lathes, &c. &c.

Also, a second hand Steam Engine, 16 horse power, and the works for two Saw Mills.

Any kind of Machine, Model or Mill-work built to order, and all mills planned and erected by the subscriber, warranted to operate well.

Orders can be left with J. F. Callan, Washington, D. C.; S. Sands, Farmer office; or the subscriber.

Mr. Abner Linthum, Jr., and all Machinists are invited to a fair trial of Grinding against my Corn and Cob Crushers, and if I do not do more work, taking the power, quantity, and quality into consideration, I will give them my machine gratis.

Patent Rights for sale by the subscriber.

no 8

JAS. MURRAY, Millwright, Baltimore.

MANGELWURZEL AND FRENCH SUGAR BEET SEED,

Just received and for sale by

ROBT. SINCLAIR JR. & CO.

Ap 22

Seedsman, No. 60 Light st.

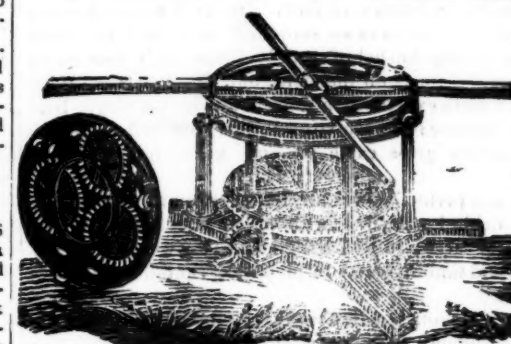
CLEAZY'S IMPROVED SELF-SHARPENING PLOUGH.

J. S. EASTMAN, Pratt street, a little west of the Baltimore & Ohio rail road Depot, would invite public attention to this superior implement, both as to its simplicity, cheapness and good work with light draft. He will furnish patterns to manufacturers living out of this state on reasonable terms. may 1

MURRAY'S CORN & COB CRUSHERS & GRINDERS

The subscriber having so simplified the construction of the Machine, and having at the same time added to its efficiency, both for the quantity and quality of its work, is now enabled to sell for \$25 Crushers of the capacity of cylinder heretofore sold at 40 dollars—Hand Crushers for 20 dollars—either with or without self-feeders. Any other machines made to order. Also, Repairs of all kinds of agricultural implements. These machines can be seen in operation opposite the Willow Grove Farm of Mr. J. Donnell. fe 14

WM. MURRAY.



MARTINEAU'S IRON HORSE-POWER IMPROVED

Made less liable to get out of order, and cheap to repair, and at less cost than any other machine.

The above cut represents this horse-power, for which the subscriber is proprietor of the patent-right for Maryland, Delaware and the Eastern Shore of Virginia; and he would most respectfully urge upon those wishing to obtain a horse power, to examine this before purchasing elsewhere; for beauty, compactness and durability it has never been surpassed.

Threshing Machines, Wheat Fans, Cultivators, Harrows and the common hand Corn Sheller constantly on hand, and for sale at the lowest prices.

Agricultural implements of any peculiar model made to order as the shonest notice.

Castings for all kinds of ploughs, constantly on hand by the pound or ton. A liberal discount will be made to country merchants who purchase to sell again.

Mr. Hussey manufactures his reaping machines at this establishment. R. B. CHENOWETH, corner of Front & Ploughman sts. near Baltimore st. Bridge, or No. 20 Pratt street. Baltimore, mar 31, 1841

NEALE & LUCKETT, No. 3, Light street wharf,

Have received from a gentleman in Maryland, a supply of FLY PROOF WHEAT for Seed, which they offer for sale at \$14 per bushel. This is a very superior wheat, weighing from 60 to 65 pounds to the bushel, yielding largely upon lands of tolerably quality, safe from the ravages of the fly, and making a rich and very nice flour. It is of German origin, and a different species from the Mediterranean wheat, which it is believed does not yield good flour. Persons wishing to supply themselves with seed, are desired to call and examine the sample now on hand. A few hundred bushels more can be obtained from the same source, if early application be made. Aug 28